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ALASKA ECONOMIC TRENDS

Alaska Department of Labor

Bill Sheffield, Governor, State of Alaska



**1 Job Opportunities in
Alaska's Health Care
Industry**

ALASKA ECONOMIC TRENDS

Bill Sheffield, *Governor, State of Alaska*

Jim Robison, *Commissioner, Department of Labor*

Judy Knight, *Director, Administrative Services*

Chuck Caldwell, *Chief, Research and Analysis*

Ed Eboch, *Editor*

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The following notes pertain to Nonagricultural Wage and Salary Employment Tables:

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1982.

***P/* Denotes preliminary estimates.**

***R/* Denotes revised estimates.**

JOB OPPORTUNITIES IN ALASKA'S HEALTH CARE INDUSTRY

By Neal Fried and Greg Huff

Job opportunities in health care have changed radically since the early days of Alaska when health care careers were limited in scope. They ranged from a medical officer at one of the few scattered Army posts or on board a Navy or Revenue Marine ship to a small number of doctors, nurses or aides working for one of the religious groups providing limited medical services as part of their mission work. Today there are many career opportunities in health care especially in "hub" communities.

This article is part I of a two part series of employment opportunities in health care occupations in Alaska. Part I will focus on opportunities in the acute care facilities (hospitals) and long term care facilities (nursing, mental health and the handicapped). Employment in these subsectors of the health care industry represent 50% of all health care jobs in the state. Part II will discuss opportunities in clinics, dentist and physicians offices, and other health care services. Information for much of this article was obtained through personal and telephone interviews with various officials in the industry.

General Characteristics and Structure

In 1982 there were approximately 7,500 jobs in the 40 acute and long term care facilities across the state. This figure includes the PHS-ANS (Public Health Service-Alaska Native Health), military, state and local government and private facilities. The 28 hospitals provide care for residents living at the most northern to the most southern borders of the state, from the PHS-ANS hospital in Barrow to Ketchikan General. The state is the largest provider of long-term care in Alaska. The state owns and operates 5 pioneer homes for Alaska's elderly and 2 mental health facilities. The remainder of the facilities are privately owned and operated.

Anchorage serves as a medical center for the state, hence, it has a proportionately higher number of health care facilities and jobs. Approximately 50% of total employment in hospitals and long term care in the state is based in Anchorage. Sitka, however, is the health care capital of Alaska. Over 12% of all jobs in Sitka are based in the acute or long term care facilities compared to 4% statewide. Sitka is also the home of Alaska's first hospital, built while Alaska was still under Russian rule.

Employment in hospitals and long term care facilities has grown exceptionally fast over the decade and is expected to continue. From 1970 to the end of 1982 employment in health care expanded nearly 190% in Alaska

compared to 130% for total statewide employment. Growing population, demographic changes, rising incomes and greater health consciousness have boosted health care employment.

Major Job Opportunities

Job opportunities in health care are determined by the supply of and demand for people with particular skills. Supply and demand in Alaska's health industry is influenced by population changes and migration patterns, locally available training, turnover, pay levels, and working conditions.

Demand for health care jobs in Alaska is strong at present and it will continue to be strong in the future. Population is growing, insurance coverage is becoming more widespread, and the number of older people is increasing. Many long term and acute care facilities are making major expansions in response to this growing demand. Growth of this industry in Alaska is part of a nationwide trend. One of the nation's weekly news magazines recently stated that the "...business of health care. . ." is "...growing faster than computers. . ."

The supply side in Alaska is determined by locally available training programs and in-migration of people with skills needed in this industry. Local training is available in some fields which provides the necessary trained labor force, but for many occupations in this industry, the necessary education must be acquired outside. Many people in Alaska have come from other locations and brought their skills with them. Many Alaskans leave the state temporarily to acquire these specific skills and then return.

There are shortages of skilled personnel for some health occupations in this industry while other occupations have a balanced or slight oversupply. Alaska's experience mirrors the nation's in many ways. When there is a national shortage in a particular field then the shortage is greater in Alaska, and when there is an oversupply nationally it is less true in Alaska. Either works in favor of the Alaska jobseeker.

Even if little growth were to occur, turnover creates opportunities. The industry lends itself to high turnover in many occupations because of the type of work performed and the odd hours many of these people are required to work. This is compounded in Fairbanks and Anchorage by the military rotation system as many of the employees in this industry are spouses of the uniformed military.

Given expansion of the industry and turnover, good job opportunities exist in many of the health fields in Alaska. Generally speaking, opportunities in Alaska's rural areas are better than in the urban centers. If

a person wishes to specialize it is more difficult in rural areas because the facilities are smaller. The job opportunities for all occupations represented in this industry are different. These differences will be discussed below. Opportunities for physicians will not be discussed in this article since few are directly employed in long term and acute care facilities. Opportunities for physicians will be discussed in Part II.

Nurses

Nursing staffs of hospitals or long term facilities are the foot soldiers and life blood of this industry. Twenty-five percent of the staff in Alaska's hospitals are nurses. During the past decade the biggest employment gain in the professional worker category has been for the registered nurse.

There are a variety of positions in a nursing staff, including nurse's aides, licensed practical nurses and registered nurses. Their duties vary in scope and educational preparation.

Nurse's Aide: Nurse's aides are also referred to as psychiatric aides and client development technicians, depending on the type of facility they work in. No formal training beyond a high school degree is required (and a high school degree is not always required). The aides perform a variety of duties, including making beds, bathing patients, cleaning rooms, taking temperatures, helping patients adjust to social situations and restraining patients. A nurse's aide must like working with people.

Job opportunities as nurse's aides are very good. A person wishing to pursue this line of work in Alaska's urban areas should have little problem finding work. In smaller communities, where hospitals exist, this may be somewhat more difficult due to the limited number of openings, but opportunities do exist. Turnover is high because of the hours, generally low pay and the nature of the work. For a person interested in a nurse's career working as a nurse's aide as a first step would prove to be an invaluable experience.

Licensed Practical Nurse: All the long term and acute facilities employ Licensed Practical Nurses. One year of formal training is required in addition to passing an exam given by the State Board of Nurses. Under the direction of doctors and registered nurses, LPNs provide a variety of care to patients.

It is generally felt that there is presently an oversupply of LPNs, and this is not expected to change. Some facilities are phasing out the use of LPNs because they are limited in their scope of work. Many smaller hospitals are phasing LPNs out because they have a very small staff of nurses during off hours (sometimes one) and in many cases an LPN cannot provide all the services necessary. Some of the larger hospitals are moving towards more

professional staff because of the increasing sophistication and specialization in health care. With some exceptions, LPNs are more widely used in nursing homes and similar settings.

Since only one additional year of education is required to become a registered nurse, a person desiring to pursue a nursing career would be better off getting the additional education. Job opportunities and the career path would vastly improve.

Registered Nurse: RNs employed in long term health facilities include those with 2 year, 3 year, baccalaureate, masters and doctorate degrees. RNs administer a myriad of health care functions and often supervise LPNs, nurse's aides and orderlies.

In Alaska the overall employment picture for RNs is competitive but at the same time good. A steady supply of RNs is found in the urban areas. A person may not find work immediately, but because of turnover and growth, opportunities are generally good.

In most of the smaller communities with long term or acute care facilities RNs are in short supply. These facilities have great difficulty attracting enough qualified RNs. The smaller facilities are generally looking for someone with good all-around experience. They do not have the luxury of hiring RNs who specialize in one particular area but prefer nurses with prenatal to critical care experience. In the larger facilities specialization is often the rule and shortages of RNs in geriatrics, intensive prenatal and critical care are not unusual. Though experience is important, newly graduated nurses need not panic. According to the University of Alaska's School of Nursing, 98% of their graduates find work within 3 months of graduation.

Therapists

The two major groups of therapists found in hospitals and long term care facilities are physical and respiratory therapists.

Physical Therapist: A physical therapist works to help restore and improve physical mobility of patients. In our interviews, we found that physical therapist was one occupation where demand far outweighed supply. A number of facilities cannot find a therapist to hire so most contract out for these services. The shortage is apparently nationwide and is expected to continue into the near future. If a person is interested in this type of work, job opportunities abound.

If one does not want to commit themselves to a 4-year educational program to become a physical therapist, there are positions for physical therapist technicians who administer care under the supervision of a qualified

therapist.

Respiratory Therapist: Respiratory therapists in a hospital setting often work in emergency situations where breathing stops or respiratory problems occur. They also provide therapy to patients with long term respiratory problems. Job opportunities for respiratory therapists are not as plentiful as for their colleagues on the physical side. Alaska does not employ a large number of respiratory therapists, so the number of openings which occur is limited. This is, however, generally an area with opportunities. The demand is not steady but comes in spurts.

Medical Technologist

Medical technologists perform a variety of laboratory tests in hospitals and supervise other laboratory staff. It is a growing occupation and employment opportunities do exist, particularly in the large hospitals. Medical technologists require four years of formal education.

Dietician/Nutritionist

Dieticians working in health care facilities ensure that patients receive the correct nutrition to maintain or improve their health. Many of the smaller facilities employ only a part-time dietician while the larger ones may have one of two. The total number of jobs in this area is few, which means openings are generally rare. There is not a great deal of turnover, but openings may occur because of growth. A person with patience, and a heart set on being a dietician may eventually secure a position in this field in the larger urban centers.

Pharmacist

The pharmacist prepares and dispenses drugs and medicine prescribed by doctors. There is no real shortage of pharmacists in Alaska, which is probably because there are many areas in the rest of the nation with an oversupply. In Alaska, it appears that there is a more balanced situation with some shortages in smaller communities and some demand for relief pharmacists.

Technician

There is a wide variety of technicians who work in hospitals. A partial list includes medical labs, radiologic, surgical, EKG, emergency medical, and biological technicians. With the exception of the medical technicians there are very few jobs in these fields. Hospitals in Alaska have little problem finding the necessary technicians as a slight oversupply exists. This is particularly true where no formal education is required because it creates a large supply of applicants. In other cases two years or less of formal

education is required to become a technician. Due to turnover and growth opportunities will occur in these fields but most likely it will be a matter of being in the right place at the right time to land one of these jobs.

Medical Records Technician

A medical records technician or clerk maintains the medical records of patients, compiles statistics, and transcribes and codes medical information. Many of the facilities in Alaska do not have certified medical record technicians, but instead train their employees on-the-job. A person who has gone through a two year medical records technician program would find good opportunities in Alaska. In larger facilities, good opportunities for advancement are found.

Major Education and Training Opportunities

Education and training needs vary from occupation to occupation, but most health care jobs require formal education ranging from several months to a decade. Many jobs require a degree or certificate from an accredited school. In Alaska, education and training opportunities are provided through the University of Alaska system including the campuses in Fairbanks and Anchorage, its 11 community colleges throughout Alaska, correspondence courses and Rural Education Centers. Although education opportunities may not be available in your local area or in state, credits completed through local programs may be transferred to other Alaskan schools or to outside colleges and universities which provide the appropriate education and training.

Qualified Alaskan residents may take advantage of various financial aid schemes and other assistance programs. The WICHE Exchange Program (Western Interstate Commission for Higher Education) helps Alaska residents obtain access to professional education not available in the state. Participants pay a reduced out of state tuition. The state reimburses the participating institution where the WICHE student enrolls for the non-resident portion of the tuition plus a portion of the institution's operating cost. The student does not receive any direct payment. For more information contact the Alaska Commission on Postsecondary Education, Pouch FP, Juneau, Alaska 99511.

The WAMI Program (Washington, Alaska, Montana, and Idaho) provides the residents of these states the opportunity to attend medical school at the University of Washington. This program will be discussed in more detail in part II of this series when job opportunities for physicians will be reviewed.

Traineeships

The Alaska Native Health Care Program through the University of Alaska Rural Education Centers provides short-term traineeship programs for minority high school and college students pursuing a career in medicine. For more information contact the Office of Personnel Management with the federal government or local Public Health Service Facility.

COSTEP (Commissioned Officer Training and Exchange Program) provides the qualified college nurse and physician student subsidized education in exchange for service with the Corps of Public Health Service as commissioned officers. For more information contact the Office of Personnel Management with the federal government or local Public Health Service Facility

The military also provides some training opportunities for various technical fields. Nurses, doctors and other professionals must have credentials before enlistment. For more information contact your local armed forces recruiter.

Nurses

Because nurses duties vary in scope, educational requirements also vary. Minimal education and training are required for nurse aides while a minimum of an associate degree is required for RNs.

Nurses Aide: Classes which may prepare a person to be a nurse's aide are available at Anchorage Community College but no formal education is available. The nurse's aide experience is valuable as a first step in a nurse's career.

Licensed Practical Nurses: The Licensed Practical Nurse candidate may obtain training at Anchorage Community College (ACC) and on a rotating basis between Juneau, Ketchikan, Sitka and Kuskokwim Community Colleges. Prerequisite courses are available through the community colleges, correspondence courses and Rural Education Centers. The training involves 3 semesters. Two semesters at the community college closest to your home and one semester at ACC.

Registered Nurse: There are various levels of training for the RN student. The associate, baccalaureate, masters and doctorate degree levels. All except the doctorate degree are available in state. The associate degree program is available at 4 of the 11 community colleges. Summer course work and internship are required at the ACC campus. The diploma program requires 24 to 30 months, but may require three academic years to complete the course of study. After receiving a diploma the graduate is prepared to successfully complete the state licensing exam to practice as a

**ALASKA
HOURS AND EARNINGS
FOR
SELECTED INDUSTRIES 1/ 2/**

	Average Hourly Earnings			Average Weekly Hours			Average Weekly Earnings		
	p/ 8/83	r/ 7/83	8/82	p/ 8/83	r/ 7/83	8/82	p/ 8/83	r/ 7/83	8/82
Mining	\$23.90	\$23.91	\$21.81	51.5	51.9	54.5	\$1230.85	\$1240.93	\$1188.65
Contract Construction 3/	24.14	24.08	23.98	45.6	44.6	44.8	1100.78	1075.97	1074.30
Manufacturing	10.42	10.38	9.92	41.9	38.9	49.6	436.60	403.78	492.03
Food and Kindred Products ...	8.20	8.27	8.36	42.6	39.2	53.2	349.32	324.18	444.75
Lumber and Paper Prod.	16.60	17.39	15.09	38.7	34.3	39.5	642.42	596.48	596.06
Trans. Comm. and Util.	17.74	16.53	14.96	34.5	39.4	40.2	612.03	651.28	601.39
Trade	10.34	10.36	9.90	35.0	35.7	35.7	361.90	369.85	353.43
Wholesale Trade	11.89	11.85	11.81	38.8	38.9	40.1	461.33	460.97	473.58
Retail Trade	9.66	9.75	9.04	33.6	34.6	34.0	324.58	337.35	307.36
Finance-Ins. and R. Estate	—	—	—	—	—	—	340.15	333.67	361.72

1/ Prepared in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor.

2/ Excludes eating and drinking establishments.

3/ Due to technical revision in construction sample, 1982 estimates are not strictly comparable to previous years data.

AVERAGE HOURS AND EARNINGS SERIES: Averages are based on data for full and part time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.

registered nurse. Statewide accessibility of this program is good. Community college campuses may not offer the complete program but do offer many general education requirements. Other nursing electives are offered via audio or teleconferencing.

The baccalaureate nurse requires 4 years of college. Programs in Alaska have been available since 1968 through a cooperating agreement between the University of Alaska at Anchorage and the Alaska Methodist University. In 1976 the University of Alaska became the sole provider of the degree. The Baccalaureate Degree program requires four academic years to complete the generic course of study. Applicants must meet the entrance requirements of the university as well as those of the nursing program. On average 90 openings occur each year at UAA School of Nursing. Competition is keen for openings. Prerequisites for the general education portion may be taken through the nearest community college, correspondence courses, or the University of Alaska at Fairbanks. The Fairbanks campus also provides assistance for students interested in attending an out-of-state school through the WICHE program. The UA Anchorage campus also provides a masters program. Nurses in this program have the opportunity to specialize and gain additional leadership skills. The WICHE program also offers assistance for those students wishing to attend a masters or doctorate degree program at an out-of-state school.

Summary of Nursing Programs by School

	Masters	RNs Baccalaureate	Associate	LPN	Nurse's Aide
U of A	•	•			
ACC			•	•	•
Fairbanks			•		
Juneau				•	
Ketchikan				•	
Sitka			•	•	
Kodiak			•		
Kuskokwim				•	

Therapist

Educational opportunities for physical and respiratory therapists and therapist assistants are limited. There are also no in state educational programs available for students interested in occupational or physical therapist assistant. Prerequisite courses may be taken in local schools and transferred to out-of-state programs. Many therapist assistants receive on-the-job training.

The University of Alaska in Fairbanks offers the most complete program in the state for students interested in a four-year physical therapist

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program. The Fairbanks campus offers a 2-year bachelor's degree program. The state has an agreement with the University of Washington, which allows Alaskan students to compete for several class positions preferentially available to them. Many prerequisite courses may be taken at local community colleges and transferred to out-of-state schools through the WICHE program. Currently there are no respiratory therapist programs available in state, however, qualified students may take advantage of several assistance programs including the WICHE program.

Medical Technologist and Laboratory Technician

Anchorage Community College provides a two-year program for individuals interested in medical laboratory work. A certificate is given upon completion and the graduate is eligible to take the National Registry Exam.

The University of Alaska at Fairbanks provides a 4 year program for medical technologist. The participant attends the last year at the University of Washington.

Other Educational Opportunities

A Medical Assistant program is available through Anchorage Community College. This two year program teaches skills including both secretarial and clinical tasks.

Other opportunities are primarily limited to out-of-state programs, although some of the prerequisite courses may be taken at Alaskan schools. Financial aid and other assistance programs are available to give Alaskan residents opportunities to obtain the education they want.

For anyone interested in more information, feel free to contact Alaska Department of Labor, 3301 Eagle Street, Anchorage, Alaska 99501, telephone (907) 264-2400. We recommend a publication by the Bureau of Labor Statistics titled *Occupational Outlook Handbook* and the career information system AKCIS (Alaska Career Information Service) available at local school districts, community colleges, the University of Alaska and Job Service.

ALASKA

By Ed Eboch

Preliminary data for October 1983 indicates a 2.9% decline in nonagricultural employment from September 1983. The decline in employment during the past month was broad based. Employment declined in all sectors of the economy with the exception of state and local government, up 5%, and slight increases in some sectors of trade although overall employment in trade declined. The corresponding unemployment rate is 8.4% up from the 7.6% September rate.

The October to September decline in employment of this year contrasts to an overall increase in employment over the past year. Both a lower unemployment rate and an increase in overall employment is characteristic of the change from October 1982.

The change in employment the past month is normal for this time of year due to the seasonal nature of many Alaskan industries and the beginning of the school year.

Education

The increase in state and local employment is largely a result of the increase in state and local education employment. The beginning of the school year for the University of Alaska and other state postsecondary programs has resulted in the expected increase in employment at this time. This increase more than offset slight declines in noneducational state employment.

The growth in education employment at the local level was a result of more than just the usual increases anticipated at this time of year. The beginning of the school year has already resulted in a marked increase over year-end school enrollment from the 1982/83 school year. According to Al Hazelton, Supervisor of Research and Evaluation for the Department of Education, this is likely to be the first year that enrollment will exceed 100,000 in the primary and secondary schools in Alaska. A 5% increase in enrollment is forecasted for the 1983/84 school year.

The Mat-Su School District has been hardest hit by the unexpected large increase in enrollments. The Mat-Su School District has grown from 5,100 students at the end of the 1981/82 school year to 6,800 at the beginning of this year. The 13% growth this year on top of the 17% growth last year has put a strain on the Mat-Su school system. The result of this growth is a shortage of classroom space and teachers in the Mat-Su district.

Other school districts that have experienced large increases in attendance

**NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA**

CHANGES FROM:

	P/ 10/83	R/ 9/83	10/82	9/83	10/82
Nonag. Wage & Salary	217100	223600	205700	-6500	11400
Mining	8000	8500	8000	-500	0
Construction	22100	23600	20600	-1500	1500
Manufacturing	11600	14800	11800	-3200	-200
Food & Kindred Prod.	5600	8500	5800	-2900	-200
Lumber & Paper Prod.	2900	3100	3100	-200	-200
All Other Mfg.	3100	3200	2900	-100	200
Trans. Comm. & Util.	18600	19700	18700	-1100	-100
Trucking & Whseing.	2200	2400	2600	-200	-400
Water Transportation	1500	1600	1400	-100	100
Air Transportation	5600	5700	5600	-100	0
Other Trans. Comm. & Utilities	9300	10000	9100	-700	200
Trade	43000	43300	39100	-300	3900
Wholesale	8300	8300	7400	0	900
Retail	34700	35000	31700	-300	3000
Gen. Merchandise & Apparel	5500	5300	4700	200	800
Food Stores	5900	5900	5100	0	800
Eating & Drinking Places	11900	12500	11300	-600	600
Other Retail Trade	11400	11300	10600	100	800
Fin.-Ins. & R. Estate	10900	11000	9900	-100	1000
Services & Misc.	39200	41100	36100	-1900	3100
Government	63700	61600	61500	2100	2200
Federal	17400	17500	17600	-100	-200
State	19900	18400	18900	1500	1000
Local	26400	25700	25000	700	1400

Prepared in cooperation with the U.S. Bureau of Labor Statistics.

Government includes teachers in primary and secondary schools and personnel employed by the University of Alaska.

Benchmark date March 1982.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

include Anchorage, up over 18%, Fairbanks (5%) and Kenai (7%). Unlike the Mat-Su District, these school districts were in a better position to accommodate the increased student enrollment. Juneau's school population has remained fairly stable.

To a large extent the dramatic increases in school enrollment the past few years have been a result of the increased in-migration patterns of these years. With the less robust Alaska economic picture and the improving economy in the lower 48, increases of this magnitude in school enrollments are not anticipated in the upcoming years.

Seasonal Changes

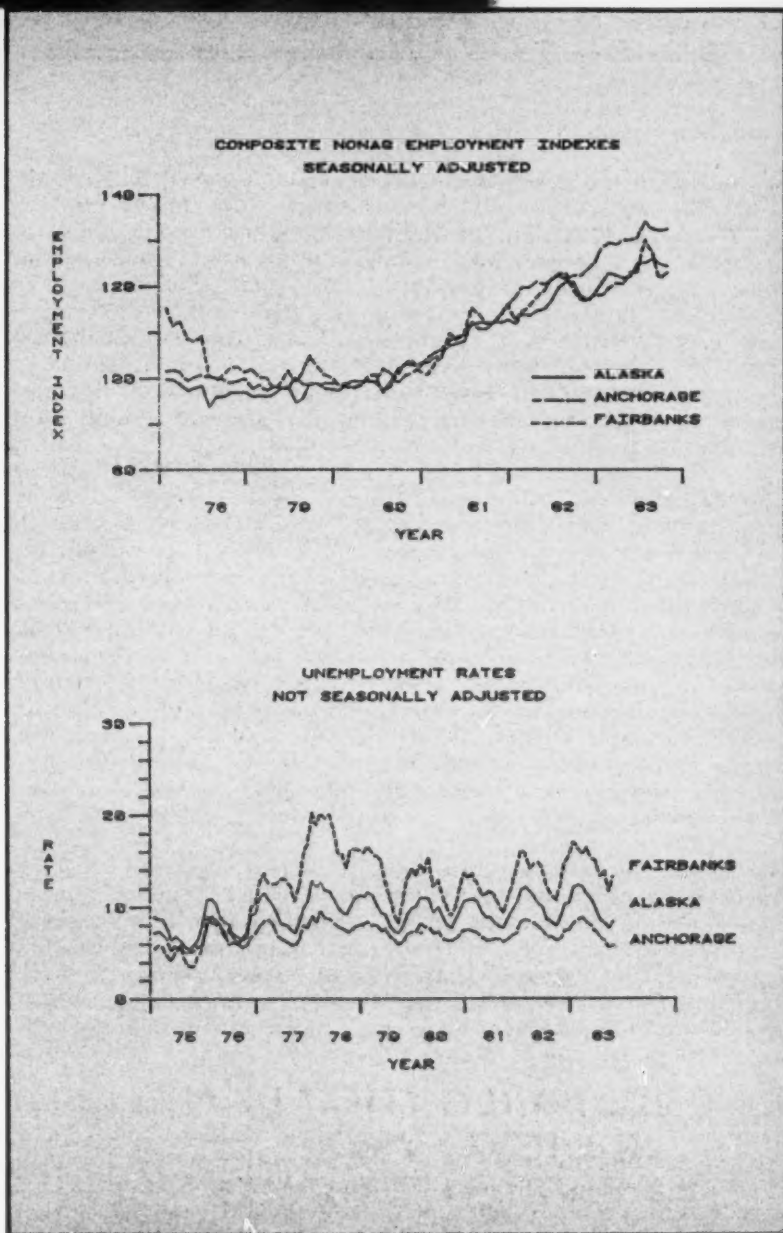
Declines in employment related to other sectors of the economy are typical for this time of year. Seafood processing declined as the peak fishing season ended. The decline was perhaps greater than usual due to what is happening in the shellfish industry. Unfortunately this situation is not likely to change in the near future because of the devastation of crab and shrimp stock. The increased development of the bottomfish industry should help offset the loss of jobs due to the reduced shellfish harvest.

While the drop in construction labor is usual for this time of year, signs are increasing that over-building has occurred in the urban areas of Alaska. With the deferment of major state projects and decline in state support of local construction, it is anticipated that future construction employment decline will be greater than the usual seasonal changes.

With the coming of winter we are seeing declining employment in those service areas typically supported by tourism. Employment is off in restaurants, tour bus services, and gift shops. Overall, however, the trade and service sectors remain two of the strongest in the economy.

The increase in employment from one year ago suggests Alaska's economic growth continues to be strong. The increase in employment from October 1982 was led by state and local government, trade, and construction. With the changing picture of state revenues we cannot expect to have the growth in statewide employment continue to be led by growth in state expenditures. The improving world wide economic outlook should improve the employment prospects for Alaska seafood, lumber, mining and their support industries. Future changes in government employment will most likely be slow, related to structural changes in the Alaska economy rather than dramatic changes in state revenue.

BEST AVAILABLE COPY



ANCHORAGE-MATSU

By Greg Huff

Matsu Employment 1980-1983

Nonagricultural employment in the Matanuska-Susitna Borough has increased over 50% from 1st quarter 1980 through the 3rd quarter of 1983. This increase makes it the fastest growing area in the state. The area's population boom and millions of public construction dollars has helped spark this growth.

Construction activity, the most visible sign of the expanding economy has resulted in nearly a four fold increase in Matsu construction employment. The growth rate in Matsu's construction employment has outpaced the growth rates of all other industries combined. Construction accounted for one-third of all new jobs created from 1980 to 1983.

Growth in population has induced a surge of residential construction in the borough, particularly in the Palmer and Wasilla areas. Stimulation of this residential building activity stems from the limited amount of land available for residential use in Anchorage and the high concentration of potential home buyers. The valley has available space and residential property costs 10-20% less than residential property in Anchorage. This cost differential is very attractive to many Anchorage workers even considering the driving distance to work. (Census data reveals that a third of all valley residents commute to and from Anchorage.) Adding impetus to the construction activity has been the myriad of projects sponsored through state appropriations and other public monies. Millions of dollars have gone into schools, fire houses and other public facilities and road improvements.

The Mining and Manufacturing industries were the only sectors which experienced some ups and downs in employment over the period. Mining employment grew initially and later fell with the reopening and closing of Independence Mine near Palmer. During the construction and exploration phase of the mine, 100 workers were at the site. Inadequate concentration of gold ore at current gold prices sharply curtailed the operation. Manufacturing employment grew and fell due to fluctuation in the demand for prefabricated buildings.

The population explosion has also given rise to employment growth in government and industries providing a variety of goods and services. Government employment has increased 28% since 1980. A large amount of this growth is a result of an increase in school population creating a need for teachers and support staff. With the borough's growth government's share of the total number of jobs declined from 41% in 1980 to 34% in 1983.

LABOR FORCE BY REGION AND CENSUS DIVISION

	Labor Force			Unemployment			Rate			Employment		
	P 10 83	R 9 83	10 82	P 10 83	R 9 83	10 82	P 10 83	R 9 83	10 82	P 10 83	R 9 83	10 82
Alaska Statewide	215716	221088	210603	18023	16903	18884	8.4	7.6	9.0	197693	204185	191719
Anchorage-Matsu Region....	112540	113965	109456	7230	7037	7860	6.4	6.2	7.2	105310	106928	101596
Anchorage	101424	102794	98741	5873	5775	6560	5.8	5.6	6.6	95551	97019	92181
Matanuska-Susitna	11116	11171	10715	1357	1262	1300	12.2	11.3	12.1	9759	9909	9415
Gulf Coast Region.....	23334	24404	22945	2622	2406	3044	11.2	9.9	13.3	20712	21998	19901
Cordova	1221	1257	1175	112	79	110	9.2	6.3	9.4	1109	1178	1065
Kenai	12062	12700	11936	1509	1492	1796	12.5	11.7	15.0	10553	11208	10140
Kodiak	5203	5416	5087	474	393	543	9.1	7.3	10.7	4729	5023	4544
Seward	1688	1754	1737	211	185	318	12.5	10.5	18.3	1477	1569	1419
Valdez.....	3160	3277	3010	316	257	277	10.0	7.8	9.2	2844	3020	2733
Interior Region.....	28870	28957	28060	3722	3255	3423	12.9	11.2	12.2	25148	25702	24637
Fairbanks.....	23644	23718	22961	3146	2769	2880	13.3	11.7	12.5	20498	20949	20081
Southeast Fairbanks	2306	2299	2208	250	198	194	10.8	8.6	8.8	2056	2101	2014
Upper Yukon	709	728	671	96	101	70	13.5	13.9	10.4	613	627	601
Yukon-Koyukuk.....	2211	2212	2220	230	187	279	10.4	8.5	12.6	1981	2025	1941
Northern Region	10761	11359	9918	733	764	727	6.8	6.7	7.3	10028	10595	9191
Barrow-North Slope	2900	3060	2690	195	202	211	6.7	6.6	7.8	2705	2858	2479
Kobuk.....	3377	3537	3113	265	249	261	7.8	7.0	8.4	3112	3288	2852
Nome	4484	4762	4115	273	313	255	6.1	6.6	6.2	4211	4449	3860
Southeast Region	29374	31316	30259	2869	2696	3027	9.8	8.6	10.0	26505	28620	27232
Angoon	389	423	423	38	44	63	9.8	10.4	14.9	351	379	360
Haines	993	1057	1038	99	91	119	10.0	8.6	11.5	894	966	919
Juneau	10507	11298	10811	885	908	925	8.4	8.0	8.6	9622	10390	9886
Ketchikan	6139	6539	6348	563	519	620	9.2	7.9	9.8	5576	6020	5728
Outer Ketchikan.....	774	801	865	117	92	190	15.1	11.5	22.0	657	709	675
Prince of Wales.....	1405	1536	1423	179	212	163	12.7	13.8	11.5	1226	1324	1260
Sitka	4286	4563	4426	399	366	432	9.3	8.0	9.8	3887	4197	3994
Skagway	1600	1615	1492	304	215	160	19.0	13.3	10.7	1296	1400	1332
Wrangell-Petersburg	3281	3484	3433	285	249	355	8.7	7.1	10.3	2996	3235	3078
Southwest Region	10837	11087	9965	547	745	803	7.8	6.7	8.1	9990	10342	9162
Aleutian Islands	2873	2954	2608	156	142	117	5.4	4.8	4.5	2717	2812	2491
Bethel	3492	3576	3240	314	286	325	9.0	8.0	10.0	3178	3290	2915
Bristol Bay Borough	393	393	361	34	22	32	8.7	5.6	8.9	359	371	329
Bristol Bay	1436	1456	1331	94	67	101	6.5	4.6	7.6	1342	1389	1230
Kuskokwim.....	970	979	860	104	82	65	10.7	8.4	7.6	866	897	795
Wade Hampton	1673	1729	1565	145	146	163	8.7	8.4	10.4	1528	1583	1402

P =Preliminary 1982 Benchmark

R =Revised

Federal guidelines require the use of unrounded labor data, adjusted to be consistent with the Current Population Survey (CPS) in formulas used to allocate federal funds. Comparisons between different time periods are not as meaningful as other time series published by the Alaska Department of Labor; because Alaska's CPS sample size is inadequate to accurately indicate monthly changes in level. The sampling errors are random in nature; meaning that the unemployment rates, in any given month, are as likely to be high as frequently as they are low. The official definitions of unemployment, currently in place, exclude anyone who has made no attempt to find work in the four week period up to and including the week that includes the twelfth of each month. Most economists feel that Alaska's bush localities have proportionately more of these discouraged workers.

**NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE**

CHANGES FROM:

	<i>P/</i>	<i>R/</i>			
	10/83	9/83	10/82	9/83	10/82
Nonag. Wage & Salary	108050	109400	99950	-1350	8100
Mining	3250	3300	3150	-50	100
Construction	10950	11550	9700	-600	1250
Manufacturing	2650	2700	2250	-50	400
Food & Kindred Prod.	400	400	400	0	0
Other Mfg.	2250	2300	1850	-50	400
Trans. Comm. & Util.	9100	9350	8650	-250	450
Trucking & Whseing	1250	1250	1400	0	-150
Water Transportation	450	450	300	0	150
Air Transportation	3600	3650	3450	-50	150
Other Trans. Comm. & Utilities	3800	4000	3500	-200	300
Trade	25900	25850	23850	50	2050
Wholesale	6150	6100	5600	50	550
Retail	19750	19750	18250	0	1500
Gen. Merchandise	1800	1750	1700	50	100
Food Stores	2600	2600	2400	0	200
Eating & Drinking Places	7450	7550	6950	-100	500
Other Retail Trade	7900	7850	7200	50	700
Fin.-Ins. & R. Estate	7100	7100	6550	0	550
Services & Misc.	24000	24550	21300	-550	2700
Government	25100	25000	24500	100	600
Federal	10100	10200	9850	-100	250
State	6600	6150	6500	450	100
Local	8400	8650	8150	-250	250

**NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE-MATSU**

CHANGES FROM:

	<i>P/</i>	<i>R/</i>			
	10/83	9/83	10/82	9/83	10/82
Nonag. Wage & Salary	114200	115700	105600	-1500	8600
Mining	3300	3400	3250	-100	50
Construction	11900	12500	10750	-600	1150
Manufacturing	2900	3050	2500	-150	400
Trans.-Comm. & Util.	9700	9950	9100	-250	600
Trade	27050	27000	24900	50	2150
Fin.-Ins. & R. Estate	7350	7350	6700	0	650
Services & Misc.	25100	25900	22350	-800	2750
Government	26900	26550	26050	350	850

Employment in private enterprises supplying services ranging from medical care to a host of personal and business services, wholesale and retail goods, electricity and telephone services has increased an average of 50% since 1980.

With the rapid growth of the population in the Matanuska-Susitna Borough we can expect future growth in the area of government employment and private service employment as the service areas catch up to gains in population.

**Matsu Nonagricultural Employment
1980-1983**

	1980 1/	1980	Annual Average 1981	1982	1983 1/	Percent Change 1980-1983 2
Total Employment	3,224	3,266	3,663	4,354	5,015	56
Mining	36	34	99	100	50	39
Construction	178	178	253	517	734	312
Manufacturing	*	50	105	70	65	*
Trans. Comm. & Utilities	314	320	344	381	515	64
Trade	725	731	750	898	1,040	43
Fin. Ins. & Real Estate	117	120	131	188	210	79
Services/Misc.	*	498	566	639	730	47
Government	1,325	1,340	1,415	1,561	1,700	28

1/ 3 quarter average. Last 2 quarters of 1983 estimated.

2/ Based on average employment of first 3 quarters of 1980 versus the first 3 quarters of 1983.

FAIRBANKS/INTERIOR

By Neal Fried

Yukon-Koyukuk 1980-1983

Wage and salary statistics are reported in this publication on a monthly basis for the Interior and Fairbanks, but not for smaller geographic areas within the Interior. Fairbanks' figures mask the remainder of the Interior making it difficult to determine trends which may be occurring elsewhere. Periodically, statistics do become available which make an employment analysis of sub-areas possible. This month wage and salary employment figures for the Yukon-Koyukuk will be covered (see table 19).

The Yukon-Koyukuk division covers a large geographic area which includes more than a dozen communities. The area includes all of the communities along the Parks Highway north of Cantwell, the Dalton Highway to the North Slope Borough's boundary, and all of the communities west of the highway to Kaltag on the Yukon River, and south to McGrath. A sample of the communities included in this area are Minto, Nulato, McKinley Park, Nenana, Livengood, Allakaket, Tanana, Huslia, Kaltag, and McGrath.

Employment

Yukon-Koyukuk's wage and salary employment grew 6% from 1980 to 1982. This is far below the state's growth rate of 17%. Why has Yukon-Koyukuk's economy not kept pace with the rest of the state?

Most of the state employment growth was a result of the growth in the state's budget of recent years. Yukon-Koyukuk has benefited through increases in state and local government employment, capital projects, dividend payments and, to an extent, subsidized interest loans. Yukon-Koyukuk has not been able to keep up with the state growth rate because of its' undeveloped economic infrastructure. There is little economic infrastructure to capture the dollars spent in the economy, and therefore there is little or no multiplier effect as the dollars leak quickly out of the local economies.

When goods and services are purchased by the residents of these communities they are usually bought in Fairbanks or Anchorage. When capital projects are built, they are often built by outside firms and labor. None of these communities have a population of more than 550, and therefore the establishment of a viable secondary sector to capture these dollars is difficult.

**NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
FAIRRANKS**

CHANGES FROM:

	P/ 10/83	R/ 9/83	10/82	9/83	10/82
Nonag. Wage & Salary	26800	27700	25550	-900	1250
Mining	250	350	300	-100	-50
Construction	2750	3500	2350	-750	400
Manufacturing	550	550	500	0	50
Trans. Comm. & Util.	2900	3050	2800	-150	100
Trucking & Whseing.	450	500	350	-50	100
Air Transportation	600	650	600	-50	0
Other Trans. Comm.					
& Utilities	1850	1900	1850	-50	0
Trade	5400	5650	5050	-250	350
Wholesale	900	900	900	0	0
Retail	4500	4750	4150	-250	350
Gen. Merchandise					
& Apparel	400	450	400	-50	0
Food Stores	750	800	700	-50	50
Other Retail Trade	3350	3500	3050	-150	300
Fin.-Ins. & R. Estate	1050	1000	1000	50	50
Services & Misc.	5100	5250	5000	-150	100
Government	8800	8350	8550	450	250
Federal	2450	2450	2400	0	50
State	3950	3500	3850	450	100
Local	2400	2400	2300	0	100

**NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
INTERIOR**

CHANGES FROM:

	P/ 10/83	R/ 9/83	10/82	9/83	10/82
Nonag. Wage & Salary	30850	31550	29200	-700	1650
Mining	400	450	450	-50	-50
Construction	2850	3600	2450	-750	400
Manufacturing	550	600	500	-50	50
Trans. Comm. & Util.	3650	3850	3700	-200	-50
Trade	5950	6200	5350	-250	600
Fin.-Ins. & R. Estate	1100	1100	1050	0	50
Services & Misc.	5500	5750	5300	-250	200
Government	10850	10000	10400	850	450

**Yukon-Koyukuk Nonagricultural Employment
1980-1982**

	1980	1981	1982
Total Nonag. Employment	1,880	1,884	2,029
Mining	•	•	•
Construction	•	24	42
Manufacturing	•	•	•
Transportation	•	•	707
Trade	•	•	173
Wholesale	•	•	33
Retail	136	130	140
Fin., Ins. & Real Estate	16	21	23
Services	63	111	122
Government	802	740	835
Federal	243	218	216
State	101	90	106
Local	427	432	507

• Nondisclosable.

Despite these leakages, the service and trade sectors did grow during the past 4 years in response to growing incomes and population. Tourism also provided somewhat of a boost to these communities. The number of visitors to Denali National Park increased by more than 60% over the past 4 years. 1/

Government employment continues to be the mainstay of wage and salary employment. Approximately 41% of salaried employees are employed by government, mostly on the federal and local levels. The federal sector makeup is largely military support and park personnel. The federal sector has actually declined slightly over the years. The local sector has grown in response to additional state funds, a growing school population and overall population growth. The government sector would be larger if the private contract personnel at the remote missile tracking stations were included. This would swell government's share of wage and salary employment to more than 60%.

Mining employment has recently received a boost with the planned shipments of coal from the Usibelli mine to Korea. Gold mining activity has also been on the upswing for the past three years. Most of these individuals are not captured in our figures because they are not paid in wages and salaries. Our statistics also fail to measure the subsistence economy which is important in many of these communities.

In spite of the growth that has occurred in the Yukon-Koyukuk area, full time year-around salary employment is scarce. Household income is

1/ U.S. Department of Interior.

approximately 50% of the state's average and labor force participation in the Yukon-Koyukuk is among the lowest in the state. High unemployment persists, and would be even higher if many of this area's residents felt work were available. (A person is considered unemployed only if they are actively seeking work.) Lack of employment opportunities will cause the Yukon-Koyukuk area to continue to lag the state in economic growth.

GULF COAST

By Neal Fried

Kenai-Cook Inlet 1980-1983

Each month wage and salary statistics are published for the Gulf Coast region but not for smaller geographic areas within the region. Periodically employment statistics are published for sub-areas. This month wage and salary statistics for the Kenai-Cook Inlet area will be discussed (see table page 23).

The Kenai-Cook Inlet division is synonymous with the Kenai Peninsula Borough, but excludes Seward, Hope, Moose Pass and Copper Landing. It includes the communities of Kenai, Homer, Soldotna, Seldovia, Tyonek and a number of smaller communities on the peninsula.

Employment

During the past 3 years, the state experienced accelerated growth in employment and a period of general prosperity. The Kenai-Cook Inlet area has shared this experience. The area's wage and salary employment has grown more rapidly than the state during the period 1980-1982, experiencing 22% growth compared to 17% statewide. Nonagricultural payroll in Kenai-Cook Inlet increased from \$182 million to \$246 million. Employment continued to grow through the first quarter of 1983; the last quarter for which data exists.

Source of Growth

The economy in Kenai-Cook Inlet is one of the most diversified in the state. The basic industries include strong representation in manufacturing (refining and fish processing), fishing, tourism, mining (oil), and government. Through 1982 all industries in the area contributed to this surge in employment. Industries which have contributed the most, with the exception of government, are services, construction, insurance and real estate, and trade.

Most of the expansion in these industries can be attributed to the record state budgets for the past 4 years. This stimulus has come in the forms of larger capital budgets, subsidized housing loans, increases in revenues to local government, tax relief, growth in state employment and dividend payments.

Construction's surge (33% from 1980-1982) has been fueled by state dollars in the form of public construction and subsidized interest rates. In 1981 the number of residential housing units began to grow and each year since the

**NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
GULF COAST**

CHANGES FROM:

	P/ 10/83	R/ 9/83	10/82	9/83	10/82
Nonag. Wage & Salary	19000	20250	18300	-1250	700
Mining	750	750	700	0	50
Construction	1950	2050	1850	-100	100
Manufacturing	2650	3550	2650	-900	0
Food & Kindred Prod.	1850	2700	1950	-850	-100
All Other Mfg.	800	850	700	-50	100
Trans. & Comm. Utilities....	2100	2200	2300	-100	-200
Trade	2950	3250	2750	-300	200
Wholesale	350	550	350	-200	0
Retail	2600	2700	2400	-100	200
Fin.-Ins. & R. Estate	500	500	500	0	0
Services & Misc.	3100	3350	2800	-250	300
Government	5000	4600	4750	400	250
Federal	500	500	500	0	0
State	1550	1400	1500	150	50
Local	2950	2700	2750	250	200

number has increased. Public construction has included new schools, expansion of the Homer Harbor, the new Sports Arena in Soldotna, road construction, and a myriad of other projects undertaken by the public sector. Private construction also experienced a resurgence as new shopping centers, banks, restaurants and other expansions of businesses occurred.

Services, Finance, Insurance and Real Estate, and Trade have grown by 33%, 29% and 17%, respectively. These industries are typically classified as part of the secondary sector. All of these industries have benefited from the overall growth in the area as well as growth in the tourist traffic from Anchorage and elsewhere in the country.

Government remains the area's largest single employer—employing 20% of the wage and salary employment. This is a much smaller share of total employment compared to the statewide average of 30%. Growth occurred in both state and local government in response to greater state revenues and a growing population.

The Borough's population grew by 15% from 1980 to 1982 which is twice as fast as the state's growth rate. The Borough is perceived by many people as a desirable place to live because of the recreation possibilities it offers, the rustic lifestyle and its scenic setting. This encourages in-migration. It is generally believed that growth in employment opportunities is the major catalyst for population growth, but the Peninsula attracts many people

simply because of the lifestyle, which in itself provides stimulus to its secondary industries.

Though growth is the theme of the article, it does not mean employment opportunities abound in the area. The population has grown fast enough to more than absorb the new jobs which have resulted from the expanding economy. The unemployment rate in 1982 was 15.9%, two points higher than it was in 1980. 1983's rates are mirroring 1982's. Fishing, construction and tourism remain very seasonal and therefore take their toll when winter hits the Peninsula. As a result the unemployment rate can fluctuate as much as 10 points during the year.

The growth in employment has provided Kenai-Cook Inlet's residents with new and additional opportunities, but the labor market has remained very competitive in the area, and high unemployment persists.

Correction: In last months article on Kodiak it was stated that building permits stood at 172 in August 1983 and were above year-ago levels. It should instead read building permits stood at 96, which is below 1982's level.

**Kenai-Cook Inlet Nonagricultural Employment
1980-1982**

	1980	1981	1982
Total Nonag. Employment	7,134	7,960	8,693
Mining	755	781	791
Construction	611	697	814
Manufacturing	1,231	1,420	1,390
Food & Kindred Products	668	836	838
All Other Manufacturing	563	584	552
Trans. Comm. & Utilities	622	843	956
Trade	1,199	1,309	1,398
Wholesale	257	324	296
Retail	942	985	1,102
Fin. Insurance & Real Estate	203	226	262
Services and Misc.	1,033	1,119	1,326
Government	1,480	1,565	1,756
Federal	119	116	122
State	332	378	424
Local	1,029	1,071	1,210

SOUTHEAST ALASKA

By John Boucher

Juneau Employment 1980-1982

During the period before and after the 1982 capital relocation vote, it was generally put forth that the threat of capital relocation had put a constraint on Juneau's economic growth. Conventional wisdom held that with the uncertain future of the city's base industry, business would be hesitant to invest capital in projects that would depend on long term viability of the community. However, two forces in the local economy; the addition of millions of oil revenue dollars to state budgets and a rapidly expanding local population helped to counteract the constraint of the relocation issue.

Given the possibility of relocation, expansion in Juneau was substantial during this period. During 1980-82 statewide total nonagricultural employment grew 17% while Juneau's employment grew 11.9%. Juneau's largest industry, state government employment, grew 12% during this period while state government employment in all of Alaska grew 16.8%. Strong state government employment growth in Juneau might be surprising given the possibility of relocation, but pressure for additional services statewide and increasing revenue to provide them apparently outweighed speculation of higher moving costs that would be incurred in the future.

Increasing state revenue also made its presence felt in construction and local government employment. Juneau construction employment grew 43% during the period, fueled by state projects such as Centennial Hall, Auke Bay Ferry Terminal and senior citizen housing. Private building construction also flourished as state government growth contributed to the need for additional office space and residential housing. Local government employment grew 12.6% during this period, a reflection of the increasing state funds available to the city.

What might be considered more surprising about the period prior to the capital move vote is the rate some private sectors expanded during this uncertain time. Retail Trade employment increased 20%, Finance, Insurance and Real Estate 22.8%, and Services increased 22%. In two out of these three industries growth in Juneau exceeded the statewide percentage growth during this period. Two factors are apparent in these figures; increasing population which broadened the need for secondary industries and a willingness of the private sector to gamble on the outcome of the capital move vote.

**NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
SOUTHEAST ALASKA**

CHANGES FROM:

	<i>P/ 10/83</i>	<i>R/ 9/83</i>	10/82	9/83	10/82
Nonag. Wage & Salary	28900	31200	28800	-2300	100
Construction	2000	2250	1850	-250	150
Manufacturing	3900	5150	4500	-1250	-600
Food & Kindred Prod.	1300	2500	1650	-1200	-350
Lumber & Paper Prod.	2350	2450	2600	-100	-250
All Other Mfg.	250	200	250	50	0
Trans. Comm. & Util.	2000	2200	2000	-200	0
Trade	4300	4550	4250	-250	50
Wholesale	350	400	350	-50	0
Retail	3950	4150	3900	-200	50
Fin.-Ins. & R. Estate	1000	1000	950	0	50
Mining, Svcs. & Misc.	4000	4250	3800	-250	200
Government	11700	11800	11450	-100	250
Federal	2400	2500	2300	-100	100
State	5300	5400	5350	-100	-50
Local	4000	3900	3800	100	200

**Juneau Nonagricultural Wage and Salary Employment
1980-1982**

	1980	1981	1982	% Change 80-81	% Change 81-82
Total Nonag. Employment	10,914	11,518	12,210	5.5	6.0
Mining	*	*	12	—	—
Construction	375	506	539	34.9	6.5
Manufacturing	*	*	151	—	—
Transportation	956	1,037	916	8.5	-1.7
Trade	1,555	1,699	1,867	9.3	9.9
Wholesale	149	167	170	12.1	1.9
Retail	1,406	1,532	1,697	9.0	10.8
Fin.-Ins. & Real Estate	429	517	527	20.5	1.9
Services	1,393	1,370	1,699	-1.7	24.0
Government	6,055	6,181	6,433	2.1	4.1
Federal	1,187	1,011	973	-14.8	-3.8
State	3,888	4,105	4,358	5.6	6.2
Local	978	1,065	1,102	8.9	3.5

All totals are annual averages.

* Indicates nondisclosable number.

HOURS AND EARNINGS

By Kathryn Lizik

With the winding down of salmon processing extending into September, peak run processing crews have been reduced, pulling hours worked per week down 36% from August for food and kindred products. At the same time the remaining higher paid senior crews have pushed average hourly wages up 16% but this was not enough to hold average weekly earnings steady which dropped 44% from \$339.83 to \$252.46, between August and September.

The activity in food and kindred products was largely responsible for pushing the average hourly earnings of the Manufacturing industry up 32% over August with a reciprocal reduction in average weekly hours of 21%.

Other Industries' hours and earnings remained reasonably steady in September with increases in average hourly earnings ranging from less than 1% for Construction to 6% in Transportation, Communications, and Public Utilities. Offsetting drops in average weekly hours also occurred across the board except for Construction which experienced a 1% rise.